

AMENDMENTS TO THE CLAIMS

Please make the following amendments to the claims:

1-2. (Cancelled)

3. (Currently Amended) The method of claim [[1]] 62, wherein said step of establishing connectivity configuring further includes the step of ~~actuating~~ configuring at least one switch such that a plurality of physical links associated with a plurality of data link connection identifiers (DCLIs) are coupled together.

4. (Currently Amended) The method of claim 3, wherein said step of ~~actuating~~ configuring at least one switch configuring further includes the step of ~~actuating~~ configuring a digital subscriber loop access multiplexer (DSLAM) connected to a plurality of second communication devices such that said second communication device associated with said specified identifier is connected by said step of establishing connectivity.

5. (Currently Amended) The method of claim [[1]] 62, wherein said step of establishing connectivity configuring further includes the step of configuring the network device to route ~~routing~~ data over a plurality of physical links associated with said predefined identifier.

6. (Cancelled)

7. (Currently Amended) The method of claim [[1]] 62, wherein said ~~location is a site~~ first communication device is located in a network service provider communication system.

8. (Currently Amended) The method of claim [[1]] 62, wherein said ~~location is a site~~ first communication device is located in said access provider communication system.

9. (Currently Amended) The method of claim [[1]] 62, wherein said step of associating further includes the step of associating a predefined circuit identifier (ID) with said second communication device.

10. (Currently Amended) The method of claim [[1]] 62, further including the step of assigning a first internet protocol (IP) address, wherein said first IP address corresponds to said second communication device.

11. (Original) The method of claim 10, further including the step of associating a second IP address with said first IP address.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) The method of claim [[1]] 62, ~~wherein said step of accessing further includes the step of verifying, wherein~~ further including verifying a right to access ~~is verified~~ and the steps of specifying and establishing are implemented only after the right to access is verified.

17. (Cancelled)

18. (Currently Amended) The method of claim [[1]] 62, further including ~~the step of monitoring, wherein the step of monitoring monitors the~~ activity between said first

communications device and said second communications device, and further including ~~the step of terminating, wherein the step of terminating~~ terminates connectivity after a predefined period of no activity.

19-36. (Cancelled)

37-53. (Cancelled)

54-61. (Cancelled)

62. (New) The method of claim 10, wherein the step of assigning the first IP address is performed by the access provider.

63. (New) A method for providing connectivity between a first communication device and a second communication device, the second communication device residing in an access provider communication network, the method comprising the steps of:

receiving a specification from the first communication device, the specification comprising at least one predefined identifier of the second communication device;

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device;

associating the predefined identifier with the second communication device; and

configuring a network device to establish a route between the first communication device and the second communication device based upon the specified predefined identifier.

64. (New) The method of claim 63, wherein the predefined identifier is an IP address and the predefined communication channel is a VC.

65. (New) The method of claim 63, wherein the first communication device is located in a first network operated by a first provider, and the second communication device is located in a second network operated by a second provider different than the first provider

66. (New) The method of claim 65, wherein the first provider is a network service provider and the second provider is an access network provider.

67. (New) The method of claim 66, wherein the method is performed by a device located in the second network operated by the access network provider.

68. (New) The method of claim 63, wherein the configuring step further comprises the step of configuring a DSLAM to couple the first communication channel to the second communication channel.

69. (New) The method of claim 63, wherein the predefined identifier is a circuit ID, and the circuit ID is associated with an IP address previously assigned to the second communication device.

70. (New) The method of claim 63, wherein the predefined identifier is a circuit ID, further comprising the steps of:

at the network service provider, assigning a permanent IP address to the second communication device; and

associating the circuit ID with the assigned IP address.

71. (New) The method of claim 63, wherein the predefined identifier is a circuit ID, further comprising the steps of:

at a network service provider, assigning a temporary IP address to the second communication device, the IP address selected from a pool of available addresses; and associating the circuit ID with the assigned IP address.

72. (New) The method of claim 63, further comprising the step of verifying the request before the configuring step.

73. (New) The method of claim 63, further including the steps of:
monitoring activity between the first communications device and the second communications device; and
terminating connectivity between the first communications device and the second communications device after a predefined period of no activity.

74. (New) The method of claim 63, wherein a portion of the access provider communication network is a frame relay network.

75. (New) The method of claim 63, wherein a portion of the access provider communication network is an asynchronous transfer mode (ATM) network.

76. (New) The method of claim 63, wherein a portion of the access provider communication network is an internet protocol (IP) network.

77. (New) The method of claim 63, wherein a portion of the access provider communication network is a multiprotocol label switching (MPLS) network.

78. (New) A system for providing connectivity between a first communication device and a second communication device, the second communication device residing in an access provider communication network, the system comprising:

means for receiving a specification from the first communication device, the specification comprising at least one predefined identifier of the second communication device;

means for receiving, from the first communication device, a request to establish connectivity between the first and the second communication device;

means for associating the predefined identifier with the second communication device;
and

means for configuring a network device to establish a route between the first communication device and the second communication device based upon the specified predefined identifier.

79. (New) The system of claim 78, wherein the predefined identifier is an IP address and the predefined communication channel is a VC.

80. (New) The system of claim 78, wherein the first communication device located in a first network operated by a first provider, and the second communication device located in a second network operated by a second provider different than the first provider.

81. (New) The system of claim 80, wherein the first provider is a network service provider and the second provider is an access network provider.

82. (New) The system of claim 81, wherein the means receiving the request is located in the second operated by the access network provider.

83. (New) The system of claim 78, wherein the configuring means further comprises means for configuring a DSLAM to couple the first communication channel to the second communication channel.

84. (New) The system of claim 78, wherein the predefined identifier is a circuit ID, and the circuit ID is associated with an IP address previously assigned to the second communication device.

85. (New) The system of claim 78, wherein the predefined identifier is a circuit ID, further comprising:

means for assigning, at the network service provider, a temporary IP address to the second communication device, the IP address selected from a pool of available addresses; and
means for associating the circuit ID with the assigned IP address.

86. (New) The system of claim 78, further comprising means for verifying the request, wherein the means for configuring is dependent on the successful operation of the means for verifying.

87. (New) A method for providing connectivity between a first communication device and a second communication device, the method comprising the steps of:

receiving a specification from the first communication device over a first communication channel, the specification comprising at least one predefined identifier of the second communication device;

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device;

associating the predefined identifier with a predefined second communication channel to the second communication device; and

coupling the first communication channel to the second communication channel to establish connectivity between the first communication device and the second communication device, the first communication device located in a first network operated by a first provider, and the second communication device located in a second network operated by a second provider different than the first provider.

88. (New) The method of claim 87, wherein the first network is operated by a network service provider and the second network is operated by an access network provider.

89. (New) The method of claim 88, wherein the method is performed by a device located in the second network operated by the access network provider.

90. (New) The method of claim 87, wherein the step of associating further includes the step of associating a predefined circuit identifier (ID) with the second communication device.

91. (New) The method of claim 87, further including the step of assigning a first internet protocol (IP) address, wherein the first IP address identifies the second communication device.

92. (New) The method of claim 91, further including the step of associating a second IP address with the first IP address.

93. (New) The method of claim 91, wherein the step of assigning the first IP address is performed by the network operated by the first provider.

94. (New) The method of claim 87, further including the steps of:

monitoring activity between the first communications device and the second

communications device

terminating connectivity between the first communications device and the second

communications device after a predefined period of no activity.
95. (New) The method of claim 87, further comprising the step of verifying the

request before the configuring step.
96. (New) The method of claim 87, wherein the predefined identifier is an IP address.
97. (New) The method of claim 87, wherein the predefined communication channel

is a VC.
98. (New) The method of claim 87, wherein the coupling step further comprises the

step of configuring a DSLAM to couple the first communication channel to the second

communication channel.
99. (New) The method of claim 98, wherein the predefined identifier is a circuit ID,

and the circuit ID is associated with an IP address previously assigned to the second

communication device.
100. (New) The method of claim 98, wherein the predefined identifier is a circuit ID,

further comprising the steps of:

at the network of the first provider, assigning a permanent IP address to the second

communication device; and

associating the circuit ID with the assigned IP address.

101. (New) The method of claim 87, wherein a portion of the second network is a frame relay network.

102. (New) The method of claim 87, wherein a portion of the second network is an asynchronous transfer mode (ATM) network.

103. (New) The method of claim 87, wherein a portion of the second network is an internet protocol (IP) network.

104. (New) The method of claim 87, wherein a portion of the second network is a multiprotocol label switching (MPLS) network.

105. (New) A computer-readable medium having a program, the program comprising the steps of:

receiving a specification from the first communication device over a first communication channel, the specification comprising at least one predefined identifier of the second communication device, the first communication device located in a first network operated by a first provider and the second communication device operated by a second provider different than the first provider;

receiving, from the first communication device, a request to establish connectivity between the first and the second communication device;

associating the predefined identifier with a predefined second communication channel to the second communication device; and

coupling the first communication channel to the second communication channel to establish connectivity between the first communication device and the second communication device.

106. (New) The method of claim 105, wherein the first network is operated by a network service provider.

107. (New) The method of claim 105, wherein the second network is operated by an access network provider.

108. (New) The method of claim 105, wherein a portion of the second network is a frame relay network.

109. (New) The method of claim 105, wherein a portion of the second network is an asynchronous transfer mode (ATM) network.

110. (New) The method of claim 105, wherein a portion of the second network is an internet protocol (IP) network.

111. (New) The method of claim 105, wherein a portion of the second network is a multiprotocol label switching (MPLS) network.